

## CLAIMS:

1. A low-pressure mercury vapor discharge lamp comprising:  
a light-transmitting discharge vessel (10) enclosing, in a gastight manner, a  
discharge space (13) provided with a filling of mercury and a rare gas,  
the discharge vessel (10) comprising discharge means for maintaining a  
5 discharge in the discharge space (13),  
the discharge vessel (10) being provided with a source of mercury (7),  
the discharge vessel (10) being provided with a releasing means (8) for the  
controlled release of mercury vapor from the source of mercury (7),  
the releasing means (8) being operative in response to a condition of the low-  
10 pressure mercury vapor discharge lamp,  
the condition being a characteristic of the discharge lamp and/or a pre-  
determined time interval.
2. A low-pressure mercury vapor discharge lamp as claimed in claim 1,  
15 characterized in that the releasing means (8) is operated via a switch device (9).
3. A low-pressure mercury vapor discharge lamp as claimed in claim 2,  
characterized in that the switch device (9) is mounted in the discharge vessel (10).
- 20 4. A low-pressure mercury vapor discharge lamp as claimed in claim 2,  
characterized in that the switch device (9) comprises a reed relay (19).
5. A low-pressure mercury vapor discharge lamp as claimed in claim 1,  
characterized in that the releasing means (8) is operated via an arc discharge.
- 25 6. A low-pressure mercury vapor discharge lamp as claimed in claim 1, 2 or 5,  
characterized in that the source of mercury (7) comprises at least one dispenser fiber (17a;  
17a') comprising a mercury dispenser material.

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7. A low-pressure mercury vapor discharge lamp as claimed in claim 1, 2 or 5, characterized in that the condition of the low-pressure mercury vapor discharge lamp is indicative of a content of mercury vapor in the discharge vessel (10) below a pre-determined level.

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8. A low-pressure mercury vapor discharge lamp as claimed in claim 1, 2 or 5, characterized in that the lamp characteristics is the arc characteristic of the discharge in the discharge vessel (10), a decreased lumen output of the discharge lamp, an increased infrared contribution to the lamp spectrum of the discharge lamp, a change in the lamp voltage, changes in the dynamic behavior of the discharge lamp and/or the occurrence of striations in the discharge lamp.

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9. A low-pressure mercury vapor discharge lamp as claimed in claim 1, 2 or 5, characterized in that the product of the mercury pressure  $p_{Hg}$  and the internal diameter  $D_{in}$  of the discharge vessel (10) is in the range  $0.13 \leq p_{Hg} \times D_{in} \leq 8$  Pa.cm.

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10. A low-pressure mercury vapor discharge lamp as claimed in claim 9, characterized in that the product of the mercury pressure  $p_{Hg}$  and the internal diameter  $D_{in}$  of the discharge vessel (10) is in the range  $0.13 \leq p_{Hg} \times D_{in} \leq 4$  Pa.cm.

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11. A low-pressure mercury vapor discharge lamp as claimed in claim 1, 2, or 5, characterized in that the discharge vessel (10) contains less than 0.1 mg mercury.

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12. A compact fluorescent lamp comprising a low-pressure mercury-vapor discharge lamp as claimed in claim 1, 2, or 5, the compact fluorescent lamp comprising: at least two dual-shaped lamp parts (35; 36; 37), each comprising a first tube (41; 45; 49) and a second tube (43; 47; 51), the first tube (41; 45; 49) and the second tube (43; 47; 51) at a first end portion (41a, 43a; 45a, 47a; 49a, 51a) of each tube (41, 43; 45, 47; 49, 51) being interconnected via a tube interconnection means (42; 46; 50),

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a discharge path being formed through the tubes (41, 43; 45, 47; 49, 51) between a first (20a) and a second electrode (20b), each electrode (20a, 20b) being provided at a second end portion (41b; 51b) of one of the tubes (41; 51), the second end portions (41b; 51b) facing

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away from the first end portions (41a; 51a), the electrodes (20a; 20b) being provided at extreme ends of the fluorescent lamp,

further second end portions (43b; 45b; 47b; 49b) of the tubes (43; 45; 47; 49) being provided with a sealed end,

5 bridge parts (34; 38) for mutually connecting tubes (43, 45; 47, 49) of adjacent dual-shaped lamp parts (35, 36; 36, 37) being provided in the proximity of the second end portions (43b, 45b; 47b, 49b) of the tubes (43, 45; 47, 49),

at least one of the further second end portions (45b) being provided with the source of mercury (7) and the releasing means (8).

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13. A compact fluorescent lamp as claimed in claim 12, characterized in that a heating means (25) is provided at the further second end portion (45b).

14. A compact fluorescent lamp as claimed in claim 12, characterized in that the  
15 tube interconnection means (42; 46; 50) is either a bridge portion or a bent portion.

15. A compact fluorescent lamp as claimed in claim 12, characterized in that a lamp housing is attached to the discharge vessel of the low-pressure mercury-vapor discharge lamp, which lamp housing is provided with a lamp cap.